

## **Geary County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 6/11/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 15 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Geary County economy.<sup>1</sup>

These 15 sectors have a total direct output of approximately \$53.3 million and support 389 jobs in Geary County. Running the model for all 15 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Geary County Economy									
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	Output % of Gross Regional Product			
Direct Effect	388.7	1.10%	\$17,712,223	0.53%	\$53,302,680	1.60%			
<b>Indirect Effect</b>	104.7	0.30%	\$4,837,935	0.15%	\$8,719,643	0.26%			
<b>Induced Effect</b>	9.9	0.03%	\$661,932	0.02%	\$1,341,810	0.04%			
<b>Total Effect</b>	503.3	1.42%	\$23,212,090	0.70%	\$63,364,132	1.90%			

As shown in the above table, agriculture, food, and food processing sectors support **503 jobs**, or **1.42%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$63.4** million, roughly **1.90%** of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 15 agriculture, food, and food processing sectors is approximately \$23.2 million, or 0.70% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 0.70% of the total economy.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **143 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Geary County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	142.7	\$16,743,781		
Landscape and horticultural services	90.9	\$6,750,471		
Support activities for agriculture and forestry	60.2	\$888,273		
Veterinary services	48.5	\$4,241,732		
All other crop farming	33.1	\$2,454,589		
Grain farming	20.6	\$7,439,422		
Bread and bakery product, except frozen, manufacturing	17.3	\$2,098,664		
Animal production, except cattle and poultry and eggs	16.4	\$1,934,741		
Wholesale trade	10.8	\$2,328,279		
Oilseed farming	8.5	\$8,518,114		

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately \$16.7 million to the Geary County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	142.7	\$16,743,781		
Oilseed farming	8.5	\$8,518,114		
Grain farming	20.6	\$7,439,422		
Landscape and horticultural services	90.9	\$6,750,471		
Veterinary services	48.5	\$4,241,732		
Dairy cattle and milk production	8.3	\$2,760,722		
Real estate	7.7	\$2,653,723		
All other crop farming	33.1	\$2,454,589		
Wholesale trade	10.8	\$2,328,279		
Bread and bakery product, except frozen, manufacturing	17.3	\$2,098,664		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Geary County economy.

All Agriculture, Food, and Food Processing Sectors				
Sector	Total Employment	Total Output		
Oilseed farming	8.5	\$8,518,114.23		
Grain farming	20.6	\$7,439,422.25		
Vegetable and melon farming	0.2	\$28,480.35		
Fruit farming	0.5	\$37,354.88		
Tree nut farming	0.0	\$21.74		
Greenhouse, nursery, and floriculture production	0.5	\$58,373.02		
All other crop farming	33.1	\$2,454,588.69		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	142.7	\$16,743,780.91		
Dairy cattle and milk production	8.3	\$2,760,722.29		
Poultry and egg production	0.1	\$62,093.45		
Animal production, except cattle and poultry and eggs	16.4	\$1,934,741.47		
Bread and bakery product, except frozen, manufacturing	17.3	\$2,098,663.79		
Frozen cakes and other pastries manufacturing	1.1	\$174,119.71		
Veterinary services	48.5	\$4,241,732.33		
Landscape and horticultural services	90.9	\$6,750,470.83		

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Geary County, the retail sector was omitted.